

# **Preliminary Publications Book 2 from Project on Mineral Resources, Metallogenesis, and Tectonics of Northeast Asia**

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## **Open-File Report 03-203, version 1.0**

**2003**

Prepared in Collaboration with Russian Academy of Sciences, Mongolian Academy of Sciences, Jilin University (Changchun Branch), Korean Institute of Geology, Mining, and Materials, and Geological Survey of Japan/AIST.

This report is preliminary and has not been reviewed for conformity with U.S. Geological Survey (USGS) editorial standards or with the North American Stratigraphic Code. Any use of trade, firm, or product names is for descriptive purposes only and does not imply endorsement by the U.S. Government.

**U.S. DEPARTMENT OF THE INTERIOR  
U.S. GEOLOGICAL SURVEY**

## INTRODUCTION

This document describes the digital files on this CD-ROM report that consists of summary major compilations and syntheses accomplished in the six-year project through April 2003 for the study on the *Mineral Resources, Metdlogensis, and Tectonics of Northeast Asia (Eastern and Southern Siberia, Mongolia, Northeastern China, South Korea, and Japan)*. The CD-ROM report is for sale by U.S. Geological Survey, Information Services, ESIC Open-File Reports, PO Box 25286, Denver, CO 80225 (Telephone 888-ASK-USGS).

## ORGANIZATION OF CD-ROM

At the root (base level) of this CD-ROM are the I\_README.TXT file and this documentation (OF03-203.doc and OF03-203.pdf). The materials on the CD-ROM, including maps, tables, and articles, are stored in the following directories under the indicated file names. Articles and tables are in Word 6 format (\*.DOC) and in Adobe Acrobat Reader format (\*.PDF). Maps are in Adobe Acrobat Reader format (\*.PDF). Plain-text files are in ASCII (\*.TXT). This CD-ROM contains the following directories.

Acrobat. This directory contains Adobe Acrobat Reader installation programs for Windows and Macintosh computers. After installing this program, the files in PDF

(\*.pdf) format (text, figures, and maps) can be viewed and printed.

GEOODYNAM. This directory contains the NE Asia Geodynamics Map (5 M scale), introduction, and explanation.

GEOGMAP. This directory contains the NE Asia Geographic Base Map (5 M scale). The map is provided in Adobe Illustrator, Corel Draw 7, and Adobe Acrobat Reader (PDF) formats.

METBELTS. This directory contains the NE Asia Lode Mineral Deposit and Placer District Map (7.5 M scale), and a series of 12 NE Asia Metallogenic Belt Maps (15 M scale) on three sheets, an introduction, and a summary metallogenic belt table.

MINDEP. This directory contains summary tables of NE Asia lode mineral deposits and placer districts, and an introductory manuscript article.

MINMOD. This directory contains descriptions of mineral deposit models with references for NE Asia

PROJMAT. This directory contains NE Asia project materials, including the project emblem, and pamphlets for NE Asia and previous projects.

## CONTENTS OF DIRECTORIES ON CD-ROM

Directory	File or Subdirectory Names (Alphabetical Order)
Acrobat	Directories Mac and PC containing Adobe Acrobat Reader 5.0 installation programs.
GEOODYNAM	NE Asia Geodynamics Map - Sheet 1.pdf NE Asia Geodynamics Map - Sheet 2.pdf
GEOGMAP	Geographic Map Text.doc and .pdf Geographic Map.cdr, .ai, and .pdf
METBELTS	Introduction.doc and .pdf Metallogenic Belt Table.doc and .pdf. NE Asia Lode Mineral Deposit and Placer District Map - Sheet 1.pdf NE Asia Metallogenic Belt Maps - Sheet 2, Sheet 3, and Sheet 4.pdf
MINDEP	Introduction.doc and pdf Lode Deposits.doc and pdf Placer Districts.doc and pdf
MINMOD	NE Asia Mineral Deposit Models.doc and pdf
PROJMAT	NE Asia Project Emblem.pdf NE Asia Project Pamphlet.pdf Project Area Index Map.pdf RFE-Ak-Can Cord Project Pamphlet.pdf

## SYSTEM REQUIREMENTS

The data and text on this CD-ROM require either a UNIX® system-based or Linux® workstation, Macintosh® or compatible computer, or an IBM® or compatible personal computer, all equipped with a CD-ROM drive and a color monitor that can display 256 colors (16.7 million recommended). To use this CD-ROM, a PC should have: Intel® Pentium® or equivalent processor, Microsoft® Windows® 95 OSR 2.0, Windows 98 SE, Windows Millennium, Windows NT® 4.0 with Service Pack 5, Windows 2000, or Windows XP, and 64 MB of RAM. To use this CD-ROM, a Macintosh should have a PowerPC® processor, Mac OS software version 8.6, 9.0.4, 9.1, 9.2, or OS X; some features of Acrobat 5 may not be available for OS 8.6 and OS X due to OS limitations, and 64 MB of RAM. Almost any UNIX system-based or Linux workstation can read these files.

On any platforms, you will need Adobe® Acrobat® Reader 5.0 or higher (5.0.5 and 5.1 included on this disk for Macintosh and Windows) or other software that can translate PDF files.

## PORTABLE DOCUMENT FORMAT (PDF) FILES

This CD-ROM contains Portable Document Format (PDF) files for viewing and searching documents. The Acrobat directory contains installers for Adobe Acrobat Reader 5.0.5 and 5.1 for both Windows (PC directory) and Macintosh (Mac directory). The installers are provided on this disc, or can be downloaded as the latest version of Adobe Acrobat Reader, free, via the Internet from the Adobe homepage on the World-Wide Web at <http://www.adobe.com/>. In order to view PDF files you will need a reader that can translate PDF files. This CD-ROM contains a full-text index (INDEX.PDX and associated files in the INDEX directory) that is for use in searching the PDF files for words or sets of words using the search tool in Acrobat Reader.

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## ASSOCIATED PROJECT

These materials on this CD-ROM are a summary of major compilations and syntheses accomplished in six-year project. The major scientific goals and benefits of the project are to: (1) provide a comprehensive international data base on the mineral resources of the region that is the first, extensive knowledge available in English; (2) provide major new interpretations of the origin and crustal evolution of mineralizing systems and their host rocks, thereby enabling enhanced, broad-scale tectonic reconstructions and interpretations; and (3) promote trade and scientific and technical exchanges between the North America and Northeast Asia. Data from the project are providing sound scientific data and interpretations for commercial firms, governmental agencies, universities, and individuals that are developing new ventures and studies in the project area, and for land-use planning studies that deal with both mineral potential issues. Northeast Asia has vast potential for known and undiscovered mineral deposits; however, little information existed in English in the West until publication of products from this project. Consequently, data and interpretations from the project are providing basic knowledge for major scientific, commercial, national, and international endeavours by other interested individuals and groups.

## CUSTOMERS AND COLLABORATING AGENCIES

Customers for this and the prior include: (1) major mining, petroleum, environmental, construction, investment, and information companies, agencies, and organizations, (2) federal and state government agencies; (3) professional organizations; (4) earth science departments at universities; (5) news media; and (6) mineral resource, petroleum, and information company

consultants. A major international customer is the Commerce Working Group of the Russian-U.S.A. Commission.

The collaborating agencies for the project are the Russian Academy of Sciences, Mongolian Academy of Sciences, Mongolian Technical University, Jilin University, China, the Korean Institute of Geology, Mining, and Materials, the Geological Survey of Japan/AIST, and the U.S. Geological Survey. Other U.S.A. project participants are the Colorado School of Mines, University of Alaska Fairbanks, Stanford University, and the Northwest Mining Association, Spokane, Washington.

## **STUDY AREA AND PLANNED PRODUCTS**

The study area for the project consists of Eastern and Southern Siberia, Mongolia, Northeastern China, South Korea, and Japan. The area is approximately bounded by 40° to 82° N. latitude and 80° to 146° E. longitude.

The planned products include: (a) detailed mineral resource tables and location maps with data on about 1,700 lode deposits and about 100 placer districts, based on original, cited references; (b) regional terrane and overlap-assemblage maps and detailed explanations that provide the geologic setting for mineral deposits and metallogenic belts; (c) metallogenic-belt and mineral resource maps and interpretations; and (d) metallogenic and tectonic interpretations, including a four-dimensional time-space model depicting the crustal origin and evolution of mineral deposits. Publications for the project consist of, rapid preliminary reports, such as this report, of new and important regional geologic maps, map explanations, and general mineral resource tables and maps. Project publications are being released in both paper (USGS publications and scientific journals), digital (floppy disk, CD-ROM, GIS (ARC-View), and Internet/Web) formats. The various resource tables, maps, and interpretative materials are being authored by the international collaborators with the USGS project members serving as co-editors, and as co-authors on some interpretative articles.

## PROJECT CONTACTS

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### PROJECT SUMMARIES AVAILABLE ON INTERNET/WEB

Summary of project on Mineral Resources, Metallogensis, and Tectonics of Northeast Asia (Eastern and Southern Siberia, Mongolia, Northeastern China, South Korea, and Japan)

<http://minerals.er.usgs.gov/wr/projects/mines.shtml>

Summary of project on Mineral Deposits, Metallogensis, and Tectonics of the Russian Far East, Alaska, and the Canadian Cordillera

<http://minerals.usgs.gov/west/projects/majdeps.pdf>

### PROJECT PUBLICATIONS AVAILABLE ON INTERNET/WEB

Preliminary Publications Book 1 From Project on Mineral Resources, Metallogensis, and Tectonics of Northeast Asia: U.S.G.S. Open-File Report 99-165:  
<http://geopubs.wr.usgs.gov/open-file/of99-165/>

Significant Metaliferous and Selected Non-Metaliferous Lode Deposits and Placer Districts for the Russian Far East, Alaska, and Canadian Cordillera: U.S.G.S. Open-File Report 96-513-B:

<http://geopubs.wr.usgs.gov/open-file/of96-513-b/>

Summary Terrane, Mineral Deposit, and Metallogenic Belt Maps of the Russian Far East, Alaska, and the Canadian Cordillera: U.S.G.S. Open-File Report 98-136: <http://geopubs.wr.usgs.gov/open-file/of98-136/>

Geographic Information Systems (GIS) Compilation of Geophysical, Geologic, and Tectonic Maps for the Circum-North Pacific: U.S. Geological Survey Open-File Report 99-422: <http://geopubs.wr.usgs.gov/open-file/of99-422/>

Phanerozoic Tectonic Evolution of the Circum-North Pacific: U.S. Geological Survey Professional Paper 1626: <http://geopubs.wr.usgs.gov/prof-paper/pp1626/>

Dynamic Computer Model for the Metallogenesis and Tectonics of the Circum-North Pacific: U.S. Geological Survey Open-File Report 01-161: <http://geopubs.wr.usgs.gov/open-file/of01-161/>

## ACKNOWLEDGEMENTS

For the preparation of this report, we thank the many geologists who have worked with us for their valuable expertise in each region of Northeast Asia. We also thank managers N.L. Dobretsov, L.C. Gundersen, P.P. Heam, K. Johnson, R. Koski, L.P. Leahy, J. Medlin, M. Power, K. Schulz, P. Vikie, and J.N. Weaver for their encouragement and support of the project. We thank Russian interpreters Tatiana Bounaeva and Elena Koltunova for their skill and assistance during long and complex scientific dialogues, and for translation of complex geologic descriptions and references. We thank Vladimir Berger and Reimar Seltman for their constructive reviews.